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SPO-124

1

SEQUENCE LISTING

<110> Saito, Tadao
Shimosato, Takeshi
Kitazawa, Haruki

<120> Utilization of Cell Forcibly Expressing Toll-Like Receptor

<130> SPO-124

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<150> PCT/JP2004/002920

<151> 2004-03-05

<150> JP 2003-172132

<151> 2003-06-17

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<170> PatentIn version 3.1

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Arg Asn Leu Ala Pro Arg Pro Leu Asp Thr Leu Arg Ser Glu Asp Phe	450	455	460	465
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Asp Phe Val His Leu Ser Ser Leu Arg Thr Leu Asn Leu Lys Trp Asn
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Tyr Leu Ala Phe Phe Lys Trp Trp Ser Leu His Phe Leu Pro Lys Leu	665	670	675	
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Thr Ile Glu Pro Ser Thr Phe Leu Ala Val Pro Thr Leu Glu Glu Leu			
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gac aac ctc ccc aag agc ctg aag ctg ctg agc ctc cga gac aac tac Asp Asn Leu Pro Lys Ser Leu Lys Leu Leu Ser Leu Arg Asp Asn Tyr 650 655 660 665			2080
cta tct ttc ttt aac tgg acc agt ctg tcc ttc ctg ccc aac ctg gaa Leu Ser Phe Phe Asn Trp Thr Ser Leu Ser Phe Leu Pro Asn Leu Glu 670 675 680			2128
gtc cta gac ctg gca ggc aac cag cta aag gcc ctg acc aat ggc acc Val Leu Asp Leu Ala Gly Asn Gln Leu Lys Ala Leu Thr Asn Gly Thr 685 690 695			2176
ctg cct aat ggc acc ctc ctc cag aaa ctg gat gtc agc agc aac agt Leu Pro Asn Gly Thr Leu Leu Gln Lys Leu Asp Val Ser Ser Asn Ser 700 705 710			2224
atc gtc tct gtg gtc cca gcc ttc ttc gct ctg gcg gtc gag ctg aaa Ile Val Ser Val Val Pro Ala Phe Phe Ala Leu Ala Val Glu Leu Lys 715 720 725			2272
gag gtc aac ctc agc cac aac att ctc aag acg gtg gat cgc tcc tgg Glu Val Asn Leu Ser His Asn Ile Leu Lys Thr Val Asp Arg Ser Trp 730 735 740 745			2320
ttt ggg ccc att gtg atg aac ctg aca gtt cta gac gtg aga agc aac Phe Gly Pro Ile Val Met Asn Leu Thr Val Leu Asp Val Arg Ser Asn 750 755 760			2368
cct ctg cac tgt gcc tgt ggg gca gcc ttc gta gac tta ctg ttg gag Pro Leu His Cys Ala Cys Gly Ala Phe Val Asp Leu Leu Leu Glu 765 770 775			2416
gtg cag acc aag gtg cct ggc ctg gct aat ggt gtg aag tgt ggc agc Val Gln Thr Lys Val Pro Gly Leu Ala Asn Gly Val Lys Cys Gly Ser 780 785 790			2464
ccc ggc cag ctg cag ggc cgt agc atc ttc gca cag gac ctg cgg ctg Pro Gly Gln Leu Gln Gly Arg Ser Ile Phe Ala Gln Asp Leu Arg Leu 795 800 805			2512
tgc ctg gat gag gtc ctc tct tgg gac tgc ttt ggc ctt tca ctc ttg Cys Leu Asp Glu Val Leu Ser Trp Asp Cys Phe Gly Leu Ser Leu Leu 810 815 820 825			2560
gct gtg gcc gtg ggc atg gtg gtg cct ata ctg cac cat ctc tgc ggc Ala Val Ala Val Gly Met Val Val Pro Ile Leu His His Leu Cys Gly 830 835 840 845			2608

830	835	840	
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Trp Asp Val Trp Tyr Cys Phe His Leu Cys Leu Ala Trp Leu Pro Leu			
845	850	855	
ctg gcc cgc agc cga cgc agc gcc caa gct ctc ccc tat gat gcc ttc			2704
Leu Ala Arg Ser Arg Arg Ser Ala Gln Ala Leu Pro Tyr Asp Ala Phe			
860	865	870	
gtg gtg ttc gat aag gca cag agc gca gtt gcg gac tgg gtg tat aac			2752
Val Val Phe Asp Lys Ala Gln Ser Ala Val Ala Asp Trp Val Tyr Asn			
875	880	885	
gag ctg cgg gtg cgg ctg gag ggg cgg cgc ggt cgc cga gcc cta cgc			2800
Glu Leu Arg Val Arg Leu Glu Gly Arg Arg Gly Arg Arg Ala Leu Arg			
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ttg tgt ctg gag gac cga gat tgg ctg cct ggc cag acg ctc ttc gag			2848
Leu Cys Leu Glu Asp Arg Asp Trp Leu Pro Gly Gln Thr Leu Phe Glu			
910	915	920	
aac ctc tgg gct tcc atc tat ggg agc cgc aag act cta ttt gtg ctg			2896
Asn Leu Trp Ala Ser Ile Tyr Gly Ser Arg Lys Thr Leu Phe Val Leu			
925	930	935	
gcc cac acg gac cgc gtc agt ggc ctc ctg cgc acc agc ttc ctg ctg			2944
Ala His Thr Asp Arg Val Ser Gly Leu Leu Arg Thr Ser Phe Leu Leu			
940	945	950	
gct cag cag cgc ctg ttg gaa gac cgc aag gac gtg gtg gtg ttg gtg			2992
Ala Gln Gln Arg Leu Leu Glu Asp Arg Lys Asp Val Val Val Leu Val			
955	960	965	
atc ctg cgt ccg gat gcc cac cgc tcc cgc tat gtg cga ctg cgc cag			3040
Ile Leu Arg Pro Asp Ala His Arg Ser Arg Tyr Val Arg Leu Arg Gln			
970	975	980	985
cgt ctc tgc cgc cag agt gtg ctc ttt tgg ccc cag cag ccc aac ggg			3088
Arg Leu Cys Arg Gln Ser Val Leu Phe Trp Pro Gln Gln Pro Asn Gly			
990	995	1000	
cag ggg ggc ttc tgg gcc cag ctg agt aca gcc ctg act agg gac			3133
Gln Gly Gly Phe Trp Ala Gln Leu Ser Thr Ala Leu Thr Arg Asp			
1005	1010	1015	
aac cgc cac ttc tat aac cag aac ttc tgc cgg gga cct aca gca			3178
Asn Arg His Phe Tyr Asn Gln Asn Phe Cys Arg Gly Pro Thr Ala			
1020	1025	1030	
gaa tag ctgagagcaa cagctggaaa cagctgcatc ttcatgcctg gttcccagat			3234
Glu			
tgctctgcct gccttgctct gtcttactac accgctatct ggcaagtgcg caatatatgc			3294

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3340

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35 40 45

Phe Leu Lys Ser Val Pro Arg Phe Ser Ala Ala Ala Ser Cys Ser Asn
50 55 60

Ile Thr Arg Leu Ser Leu Ile Ser Asn Arg Ile His His Leu His Asn
65 70 75 80

Ser Asp Phe Val His Leu Ser Asn Leu Arg Gln Leu Asn Leu Lys Trp
85 90 95

Asn Cys Pro Pro Thr Gly Leu Ser Pro Leu His Phe Ser Cys His Met
100 105 110

Thr Ile Glu Pro Arg Thr Phe Leu Ala Met Arg Thr Leu Glu Glu Leu
115 120 125

Asn Leu Ser Tyr Asn Gly Ile Thr Thr Val Pro Arg Leu Pro Ser Ser
130 135 140

Leu Val Asn Leu Ser Leu Ser His Thr Asn Ile Leu Val Leu Asp Ala
145 150 155 160

Asn Ser Leu Ala Gly Leu Tyr Ser Leu Arg Val Leu Phe Met Asp Gly
165 170 175

Asn Cys Tyr Tyr Lys Asn Pro Cys Thr Gly Ala Val Lys Val Thr Pro
180 185 190

Gly Ala Leu Leu Gly Leu Ser Asn Leu Thr His Leu Ser Leu Lys Tyr
195 200 205

Asn Asn Leu Thr Lys Val Pro Arg Gln Leu Pro Pro Ser Leu Glu Tyr
210 215 220

Leu Leu Val Ser Tyr Asn Leu Ile Val Lys Leu Gly Pro Glu Asp Leu
225 230 235 240

Ala Asn Leu Thr Ser Leu Arg Val Leu Asp Val Gly Gly Asn Cys Arg
245 250 255

Arg Cys Asp His Ala Pro Asn Pro Cys Ile Glu Cys Gly Gln Lys Ser
 260 265 270
 Leu His Leu His Pro Glu Thr Phe His His Leu Ser His Leu Glu Gly
 275 280 285
 Leu Val Leu Lys Asp Ser Ser Leu His Thr Leu Asn Ser Ser Trp Phe
 290 295 300
 Gln Gly Leu Val Asn Leu Ser Val Leu Asp Leu Ser Glu Asn Phe Leu
 305 310 315 320
 Tyr Glu Ser Ile Asn His Thr Asn Ala Phe Gln Asn Leu Thr Arg Leu
 325 330 335
 Arg Lys Leu Asn Leu Ser Phe Asn Tyr Arg Lys Lys Val Ser Phe Ala
 340 345 350
 Arg Leu His Leu Ala Ser Ser Phe Lys Asn Leu Val Ser Leu Gln Glu
 355 360 365
 Leu Asn Met Asn Gly Ile Phe Phe Arg Ser Leu Asn Lys Tyr Thr Leu
 370 375 380
 Arg Trp Leu Ala Asp Leu Pro Lys Leu His Thr Leu His Leu Gln Met
 385 390 395 400
 Asn Phe Ile Asn Gln Ala Gln Leu Ser Ile Phe Gly Thr Phe Arg Ala
 405 410 415
 Leu Arg Phe Val Asp Leu Ser Asp Asn Arg Ile Ser Gly Pro Ser Thr
 420 425 430
 Leu Ser Glu Ala Thr Pro Glu Glu Ala Asp Asp Ala Glu Gln Glu Glu
 435 440 445
 Leu Leu Ser Ala Asp Pro His Pro Ala Pro Leu Ser Thr Pro Ala Ser
 450 455 460
 Lys Asn Phe Met Asp Arg Cys Lys Asn Phe Lys Phe Thr Met Asp Leu
 465 470 475 480
 Ser Arg Asn Asn Leu Val Thr Ile Lys Pro Glu Met Phe Val Asn Leu
 485 490 495
 Ser Arg Leu Gln Cys Leu Ser Leu Ser His Asn Ser Ile Ala Gln Ala
 500 505 510
 Val Asn Gly Ser Gln Phe Leu Pro Leu Thr Asn Leu Gln Val Leu Asp
 515 520 525
 Leu Ser His Asn Lys Leu Asp Leu Tyr His Trp Lys Ser Phe Ser Glu
 530 535 540
 Leu Pro Gln Leu Gln Ala Leu Asp Leu Gly Tyr Asn Ser Gln Pro Phe

545 550 555 560
 Ser Ile Lys Gly Ile Gly His Asn Phe Ser Phe Val Ala His Leu Ser
 565 570 575
 Met Leu His Ser Leu Ser Leu Ala His Asn Asp Ile His Thr Arg Val
 580 585 590
 Ser Ser His Leu Asn Ser Asn Ser Val Arg Phe Leu Asp Phe Ser Gly
 595 600 605
 Asn Gly Met Gly Arg Met Trp Asp Glu Gly Gly Leu Tyr Leu His Phe
 610 615 620
 Phe Gln Gly Leu Ser Gly Leu Leu Lys Leu Asp Leu Ser Gln Asn Asn
 625 630 635 640
 Leu His Ile Leu Arg Pro Gln Asn Leu Asp Asn Leu Pro Lys Ser Leu
 645 650 655
 Lys Leu Leu Ser Leu Arg Asp Asn Tyr Leu Ser Phe Phe Asn Trp Thr
 660 665 670
 Ser Leu Ser Phe Leu Pro Asn Leu Glu Val Leu Asp Leu Ala Gly Asn
 675 680 685
 Gln Leu Lys Ala Leu Thr Asn Gly Thr Leu Pro Asn Gly Thr Leu Leu
 690 695 700
 Gln Lys Leu Asp Val Ser Ser Asn Ser Ile Val Ser Val Val Pro Ala
 705 710 715 720
 Phe Phe Ala Leu Ala Val Glu Leu Lys Glu Val Asn Leu Ser His Asn
 725 730 735
 Ile Leu Lys Thr Val Asp Arg Ser Trp Phe Gly Pro Ile Val Met Asn
 740 745 750
 Leu Thr Val Leu Asp Val Arg Ser Asn Pro Leu His Cys Ala Cys Gly
 755 760 765
 Ala Ala Phe Val Asp Leu Leu Leu Glu Val Gln Thr Lys Val Pro Gly
 770 775 780
 Leu Ala Asn Gly Val Lys Cys Gly Ser Pro Gly Gln Leu Gln Gly Arg
 785 790 795 800
 Ser Ile Phe Ala Gln Asp Leu Arg Leu Cys Leu Asp Glu Val Leu Ser
 805 810 815
 Trp Asp Cys Phe Gly Leu Ser Leu Leu Ala Val Ala Val Gly Met Val
 820 825 830
 Val Pro Ile Leu His His Leu Cys Gly Trp Asp Val Trp Tyr Cys Phe
 835 840 845

His Leu Cys Leu Ala Trp Leu Pro Leu Leu Ala Arg Ser Arg Arg Ser
 850 855 860
 Ala Gln Ala Leu Pro Tyr Asp Ala Phe Val Val Phe Asp Lys Ala Gln
 865 870 875 880
 Ser Ala Val Ala Asp Trp Val Tyr Asn Glu Leu Arg Val Arg Leu Glu
 885 890 895
 Gly Arg Arg Gly Arg Arg Ala Leu Arg Leu Cys Leu Glu Asp Arg Asp
 900 905 910
 Trp Leu Pro Gly Gln Thr Leu Phe Glu Asn Leu Trp Ala Ser Ile Tyr
 915 920 925
 Gly Ser Arg Lys Thr Leu Phe Val Leu Ala His Thr Asp Arg Val Ser
 930 935 940
 Gly Leu Leu Arg Thr Ser Phe Leu Leu Ala Gln Gln Arg Leu Leu Glu
 945 950 955 960
 Asp Arg Lys Asp Val Val Val Leu Val Ile Leu Arg Pro Asp Ala His
 965 970 975
 Arg Ser Arg Tyr Val Arg Leu Arg Gln Arg Leu Cys Arg Gln Ser Val
 980 985 990
 Leu Phe Trp Pro Gln Gln Pro Asn Gly Gln Gly Gly Phe Trp Ala Gln
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Met Gly Pro Cys His Gly Ala Leu His
1 5

ccc ctg tct ctc ctg gtg cag gct gcc gcg ctg gcc gtg gcc ctg gcc 162
Pro Leu Ser Leu Leu Val Gln Ala Ala Ala Leu Ala Val Ala Leu Ala
10 15 20 25

cag ggc acc ctg cct gcc ttt ctg ccc tgt gag ctc cag cgc cac ggc 210
Gln Gly Thr Leu Pro Ala Phe Leu Pro Cys Glu Leu Gln Arg His Gly
30 35 40

ctg gtg aat tgc gac tgg ctg ttc ctc aag tcc gtg ccc cac ttc tcg 258
Leu Val Asn Cys Asp Trp Leu Phe Leu Lys Ser Val Pro His Phe Ser
45 50 55

gcg gca gcg ccc cgt ggt aac gtc acc agc ctt tcc ctg tac tcc aac 306
Ala Ala Ala Pro Arg Gly Asn Val Thr Ser Leu Ser Leu Tyr Ser Asn
60 65 70

cgc atc cac cac ctc cac gac tcc gac ttt gtc cac ctg tcc agc ctg 354
Arg Ile His His Leu His Asp Ser Asp Phe Val His Leu Ser Ser Leu
75 80 85

cgg cgt ctc aac ctc aaa tgg aac tgc cca ccc gcc agc ctc agc ccc 402
Arg Arg Leu Asn Leu Lys Trp Asn Cys Pro Pro Ala Ser Leu Ser Pro
90 95 100 105

atg cac ttc ccc tgt cac atg acc att gag ccc cac acc ttc ctg gcc 450
Met His Phe Pro Cys His Met Thr Ile Glu Pro His Thr Phe Leu Ala
110 115 120

gtg ccc acc ctg gag gag ctg aac ctg agc tac aac agc atc acg aca 498
Val Pro Thr Leu Glu Glu Leu Asn Leu Ser Tyr Asn Ser Ile Thr Thr
125 130 135

gta ccc gcc ctg ccc agt tcc ctc gtg tcc ctg tcc ttg agc cgt acc 546
Val Pro Ala Leu Pro Ser Ser Leu Val Ser Leu Ser Leu Ser Arg Thr
140 145 150

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Asn Ile Leu Val Leu Asp Pro Ala Asn Leu Ala Gly Leu His Ser Leu
155 160 165

cgc ttt ctg ttc ctg gat ggc aac tgc tac tat aag aac ccc tgc ccg 642
Arg Phe Leu Phe Leu Asp Gly Asn Cys Tyr Tyr Lys Asn Pro Cys Pro
170 175 180 185

cag gcc ctg cag gtg gcc ccg ggc gcc ctc ctt ggc ctg ggc aac ctt 690
Gln Ala Leu Gln Val Ala Pro Gly Ala Leu Leu Gly Leu Gly Asn Leu
190 195 200

acg cac ctg tca ctc aag tac aac aac ctc act gcg gtg ccc cgc ggc 738
Thr His Leu Ser Leu Lys Tyr Asn Asn Leu Thr Ala Val Pro Arg Gly
205 210 215

ctg ccc ccc agc ctg gag tac ctg cta ttg tcc tac aac cac atc atc Leu Pro Pro Ser Leu Glu Tyr Leu Leu Leu Ser Tyr Asn His Ile Ile 220 225 230	786
acc ctg gca cct gag gac ctg gcc aac ctg acc gcc ctg cgt gtg ctc Thr Leu Ala Pro Glu Asp Leu Ala Asn Leu Thr Ala Leu Arg Val Leu 235 240 245	834
gat gtg ggt gga aac tgc cgt cgc tgt gac cac gcc cgc aac ccc tgt Asp Val Gly Gly Asn Cys Arg Arg Cys Asp His Ala Arg Asn Pro Cys 250 255 260 265	882
atg gag tgc ccc aag ggc ttc ccg cac ctg cac cct gac acc ttc agc Met Glu Cys Pro Lys Gly Phe Pro His Leu His Pro Asp Thr Phe Ser 270 275 280	930
cac ctg aac cac ctc gaa ggc ctg gtg ttg aag gac agc tct ctc tac His Leu Asn His Leu Glu Gly Leu Val Leu Lys Asp Ser Ser Leu Tyr 285 290 295	978
aac ctg aac ccc aga tgg ttc cat gcc ctg ggc aac ctc atg gtg ctg Asn Leu Asn Pro Arg Trp Phe His Ala Leu Gly Asn Leu Met Val Leu 300 305 310	1026
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gcc ttg gac ttc agc ggc aat gcc ttg agc cgg atg tgg gcc gag gga Ala Leu Asp Phe Ser Gly Asn Ala Leu Ser Arg Met Trp Ala Glu Gly 605 610 615	1938
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ttc gac aag gca cag agc gcg gtg gcc gac tgg gtg tac aac gag ctg Phe Asp Lys Ala Gln Ser Ala Val Ala Asp Trp Val Tyr Asn Glu Leu 875 880 885	2754

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 Arg Val Arg Leu Glu Glu Arg Arg Gly Arg Arg Ala Leu Arg Leu Cys
 890 895 900 905

 ctg gag gaa cgt gac tgg cta ccc ggt aaa acg ctc ttt gag aac ctg 2850
 Leu Glu Glu Arg Asp Trp Leu Pro Gly Lys Thr Leu Phe Glu Asn Leu
 910 915 920

 tgg gcc tca gtt tac agc agc cgc aag atg ctg ttt gtg ctg gcc cac 2898
 Trp Ala Ser Val Tyr Ser Ser Arg Lys Met Leu Phe Val Leu Ala His
 925 930 935

 aca gac agg gtc agc ggc ctc ttg cgc gcc agc ttt ctg ctg gcc cag 2946
 Thr Asp Arg Val Ser Gly Leu Leu Arg Ala Ser Phe Leu Leu Ala Gln
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 cag cgc ctg ctg gag gac cgc aag gac gtt gtg gtg ctg gtg atc ctg 2994
 Gln Arg Leu Leu Glu Asp Arg Lys Asp Val Val Val Leu Val Ile Leu
 955 960 965

 cgc ccc gac gcc cac cgc tcc cgc tat gtg cgg ctg cgc cag cgc ctc 3042
 Arg Pro Asp Ala His Arg Ser Arg Tyr Val Arg Leu Arg Gln Arg Leu
 970 975 980 985

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 Cys Arg Gln Ser Val Leu Leu Trp Pro His Gln Pro Ser Gly Gln Arg
 990 995 1000

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 Ser Phe Trp Ala Gln Leu Gly Thr Ala Leu Thr Arg Asp Asn Gln
 1005 1010 1015

 cac ttc tat aac cag aac ttc tgc cgg ggc ccc acg acg gca gag 3180
 His Phe Tyr Asn Gln Asn Phe Cys Arg Gly Pro Thr Thr Ala Glu
 1020 1025 1030

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<211> 1031

<212> PRT

<213> Felis Catus

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<221> misc_feature

<222> (622)..(622)

<223> The 'Xaa' at location 622 stands for His, Arg, Pro, or Leu.

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Met Gly Pro Cys His Gly Ala Leu His Pro Leu Ser Leu Leu Val Gln
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Ala Ala Ala Leu Ala Val Ala Leu Ala Gln Gly Thr Leu Pro Ala Phe
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 Leu Pro Cys Glu Leu Gln Arg His Gly Leu Val Asn Cys Asp Trp Leu
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 Phe Leu Lys Ser Val Pro His Phe Ser Ala Ala Ala Pro Arg Gly Asn
 50 55 60
 Val Thr Ser Leu Ser Leu Tyr Ser Asn Arg Ile His His Leu His Asp
 65 70 75 80
 Ser Asp Phe Val His Leu Ser Ser Leu Arg Arg Leu Asn Leu Lys Trp
 85 90 95
 Asn Cys Pro Pro Ala Ser Leu Ser Pro Met His Phe Pro Cys His Met
 100 105 110
 Thr Ile Glu Pro His Thr Phe Leu Ala Val Pro Thr Leu Glu Glu Leu
 115 120 125
 Asn Leu Ser Tyr Asn Ser Ile Thr Thr Val Pro Ala Leu Pro Ser Ser
 130 135 140
 Leu Val Ser Leu Ser Leu Ser Arg Thr Asn Ile Leu Val Leu Asp Pro
 145 150 155 160
 Ala Asn Leu Ala Gly Leu His Ser Leu Arg Phe Leu Phe Leu Asp Gly
 165 170 175
 Asn Cys Tyr Tyr Lys Asn Pro Cys Pro Gln Ala Leu Gln Val Ala Pro
 180 185 190
 Gly Ala Leu Leu Gly Leu Gly Asn Leu Thr His Leu Ser Leu Lys Tyr
 195 200 205
 Asn Asn Leu Thr Ala Val Pro Arg Gly Leu Pro Pro Ser Leu Glu Tyr
 210 215 220
 Leu Leu Leu Ser Tyr Asn His Ile Ile Thr Leu Ala Pro Glu Asp Leu
 225 230 235 240
 Ala Asn Leu Thr Ala Leu Arg Val Leu Asp Val Gly Gly Asn Cys Arg
 245 250 255
 Arg Cys Asp His Ala Arg Asn Pro Cys Met Glu Cys Pro Lys Gly Phe
 260 265 270
 Pro His Leu His Pro Asp Thr Phe Ser His Leu Asn His Leu Glu Gly
 275 280 285
 Leu Val Leu Lys Asp Ser Ser Leu Tyr Asn Leu Asn Pro Arg Trp Phe
 290 295 300
 His Ala Leu Gly Asn Leu Met Val Leu Asp Leu Ser Glu Asn Phe Leu

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Tyr Asp Cys Ile Thr Lys Thr Thr Ala Phe Gln Gly Leu Ala Gln Leu						
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Arg Arg Leu Asn Leu Ser Phe Asn Tyr His Lys Lys Val Ser Phe Ala						
		340		345		350
His Leu His Leu Ala Pro Ser Phe Gly Ser Leu Leu Ser Leu Gln Gln						
		355		360		365
Leu Asp Met His Gly Ile Phe Phe Arg Ser Leu Ser Glu Thr Thr Leu						
		370		375		380
Arg Ser Leu Val His Leu Pro Met Leu Gln Ser Leu His Leu Gln Met						
		385		390		395
Asn Phe Ile Asn Gln Ala Gln Leu Ser Ile Phe Gly Ala Phe Pro Gly						
		405		410		415
Leu Arg Tyr Val Asp Leu Ser Asp Asn Arg Ile Ser Gly Ala Met Glu						
		420		425		430
Leu Ala Ala Ala Thr Gly Glu Val Asp Gly Gly Glu Arg Val Arg Leu						
		435		440		445
Pro Ser Gly Asp Leu Ala Leu Gly Pro Pro Gly Thr Pro Ser Ser Glu						
		450		455		460
Gly Phe Met Pro Gly Cys Lys Thr Leu Asn Phe Thr Leu Asp Leu Ser						
		465		470		475
Arg Asn Asn Leu Val Thr Ile Gln Pro Glu Met Phe Ala Arg Leu Ser						
		485		490		495
Arg Leu Gln Cys Leu Leu Leu Ser Arg Asn Ser Ile Ser Gln Ala Val						
		500		505		510
Asn Gly Ser Gln Phe Met Pro Leu Thr Ser Leu Gln Val Leu Asp Leu						
		515		520		525
Ser His Asn Lys Leu Asp Leu Tyr His Gly Arg Ser Phe Thr Glu Leu						
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Pro Arg Leu Glu Ala Leu Asp Leu Ser Tyr Asn Ser Gln Pro Phe Ser						
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Met Gln Gly Val Gly His Asn Leu Ser Phe Val Ala Gln Leu Pro Ala						
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Leu Arg Tyr Leu Ser Leu Ala His Asn Asp Ile His Ser Arg Val Ser						
		580		585		590
Gln Gln Leu Cys Ser Ala Ser Leu Arg Ala Leu Asp Phe Ser Gly Asn						
		595		600		605

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 Arg Gly Leu Arg Ser Leu Val Arg Leu Asp Leu Ser Gln Asn Arg Leu
 625 630 635 640
 His Thr Leu Leu Pro Arg Thr Leu Asp Asn Leu Pro Lys Ser Leu Arg
 645 650 655
 Leu Leu Arg Leu Arg Asp Asn Tyr Leu Ala Phe Phe Asn Trp Ser Ser
 660 665 670
 Leu Val Leu Leu Pro Arg Leu Glu Ala Leu Asp Leu Ala Gly Asn Gln
 675 680 685
 Leu Lys Ala Leu Ser Asn Gly Ser Leu Pro Asn Gly Thr Gln Leu Gln
 690 695 700
 Arg Leu Asp Leu Ser Ser Asn Ser Ile Ser Phe Val Ala Ser Ser Phe
 705 710 715 720
 Phe Ala Leu Ala Thr Arg Leu Arg Glu Leu Asn Leu Ser Ala Asn Ala
 725 730 735
 Leu Lys Thr Val Glu Pro Ser Trp Phe Gly Ser Leu Ala Gly Thr Leu
 740 745 750
 Lys Val Leu Asp Val Thr Gly Asn Pro Leu His Cys Ala Cys Gly Ala
 755 760 765
 Ala Phe Val Asp Phe Leu Leu Glu Val Gln Ala Ala Val Pro Gly Leu
 770 775 780
 Pro Gly His Val Lys Cys Gly Ser Pro Gly Gln Leu Gln Gly Arg Ser
 785 790 795 800
 Ile Phe Ala Gln Asp Leu Arg Leu Cys Leu Asp Glu Ala Leu Ser Trp
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 Pro Met Leu His His Leu Cys Gly Trp Asp Leu Trp Tyr Cys Phe His
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 850 855 860
 Ala Leu Pro Tyr Asp Ala Phe Val Val Phe Asp Lys Ala Gln Ser Ala
 865 870 875 880
 Val Ala Asp Trp Val Tyr Asn Glu Leu Arg Val Arg Leu Glu Glu Arg
 885 890 895
 Arg Gly Arg Arg Ala Leu Arg Leu Cys Leu Glu Glu Arg Asp Trp Leu
 900 905 910

Pro Gly Lys Thr Leu Phe Glu Asn Leu Trp Ala Ser Val Tyr Ser Ser
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 Arg Lys Met Leu Phe Val Leu Ala His Thr Asp Arg Val Ser Gly Leu
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 Leu Arg Ala Ser Phe Leu Leu Ala Gln Gln Arg Leu Leu Glu Asp Arg
 945 950 955 960
 Lys Asp Val Val Val Leu Val Ile Leu Arg Pro Asp Ala His Arg Ser
 965 970 975
 Arg Tyr Val Arg Leu Arg Gln Arg Leu Cys Arg Gln Ser Val Leu Leu
 980 985 990
 Trp Pro His Gln Pro Ser Gly Gln Arg Ser Phe Trp Ala Gln Leu Gly
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